



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2009-0784, FRL-9638-4]

Approval and Promulgation of Air Quality Implementation Plans; State of Mississippi; Regional Haze State Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing a limited approval of two revisions to the Mississippi state implementation plan (SIP) submitted by the State of Mississippi through the Mississippi Department of Environmental Quality (MDEQ) on September 22, 2008, and May 9, 2011, that address regional haze for the first implementation period. These revisions address the requirements of the Clean Air Act (CAA or Act) and EPA's rules that require states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I areas (national parks and wilderness areas) caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program"). States are required to assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. EPA is proposing a limited approval of these SIP revisions to implement the regional haze requirements for Mississippi on the basis that the revisions, as a whole, strengthen the Mississippi SIP. EPA has previously proposed a limited disapproval of the Mississippi regional haze SIP because of deficiencies in the State's regional haze SIP submittal arising from the remand by the U.S. Court of Appeals for the District of Columbia Circuit (D.C.

Circuit) to EPA of the Clean Air Interstate Rule (CAIR). Consequently, EPA is not proposing to take action in this rulemaking to address the State's reliance on CAIR to meet certain regional haze requirements.

DATES: Comments must be received on or before [insert date 30 days from the date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2009-0784, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. E-mail: benjamin.lynorae@epa.gov.
3. Fax: 404-562-9019.
4. Mail: EPA-R04-OAR-2009-0784, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960.
5. Hand Delivery or Courier: Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

Instructions: Direct your comments to Docket ID No. “EPA-R04-OAR-2009-0784.” EPA’s policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through www.regulations.gov or e-mail, information that you consider to be CBI or otherwise protected. The www.regulations.gov website is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Sara Waterson or Michele Notarianni, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Sara Waterson can be reached at telephone number (404) 562-9061 and by electronic mail at waterson.sara@epa.gov. Michele Notarianni can be reached at telephone number (404) 562-9031 and by electronic mail at notarianni.michele@epa.gov.

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I. What Action is EPA Proposing to Take?

EPA is proposing a limited approval of Mississippi's September 22, 2008, and May 9, 2011, SIP revisions addressing regional haze under CAA sections 301(a) and 110(k)(3) because the revisions as a whole strengthen the Mississippi SIP. Throughout this document, references to Mississippi's (or MDEQ's or the State's) "regional haze SIP" refer to Mississippi's original September 22, 2008, regional haze SIP submittal, as later amended in a SIP revision submitted May 9, 2011. This proposed rulemaking explains the basis for EPA's proposed limited approval action.¹

In a separate action, EPA has previously proposed a limited disapproval of the Mississippi regional haze SIP because of deficiencies in the State's regional haze SIP submittal arising from the State's reliance on CAIR to meet certain regional haze requirements. *See* 76 FR 82219 (December 30, 2011). EPA is not proposing to take action in today's rulemaking on

¹ Under CAA sections 301(a) and 110(k)(6) and EPA's long-standing guidance, a limited approval results in approval of the entire SIP submittal, even of those parts that are deficient and prevent EPA from granting a full approval of the SIP revision. *Processing of State Implementation Plan (SIP) Revisions*, EPA Memorandum from John Calcagni, Director, Air Quality Management Division, OAQPS, to Air Division Directors, EPA Regional Offices I-X, September 7, 1992, (1992 Calcagni Memorandum) located at <http://www.epa.gov/ttn/caaa/t1/memoranda/siproc.pdf>.

issues associated with Mississippi's reliance on CAIR in its regional haze SIP.² Comments on EPA's proposed limited disapproval of Mississippi's regional haze SIP are accepted at the docket for EPA's December 20, 2011 rulemaking (*see* Docket ID No. EPA-HQ-OAR-2011-0729). The comment period for EPA's December 30, 2011, rulemaking is scheduled to end on February 28, 2012.

II. What is the Background for EPA's Proposed Action?

A. The Regional Haze Problem

Regional haze is visibility impairment that is produced by a multitude of sources and activities which are located across a broad geographic area and emit fine particles (PM_{2.5}) (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust), and their precursors (e.g., SO₂, NO_x, and in some cases, ammonia (NH₃) and volatile organic compounds (VOC)). Fine particle precursors react in the atmosphere to form fine particulate matter which impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity, color, and visible distance that one can see. PM_{2.5} can also cause serious health effects and mortality in humans and contributes to environmental effects such as acid deposition and eutrophication.

² Mississippi's SIP revisions rely on CAIR to address BART requirements related to both nitrogen oxides (NO_x) and sulfur dioxide (SO₂). However, EPA's replacement rule for CAIR (i.e., the "Transport Rule," also known as the Cross-State Air Pollution Rule) includes Mississippi only in the trading program to cover NO_x. States such as Mississippi that are subject to the requirements of the Transport Rule trading program only for NO_x must still address BART for SO₂ and other visibility impairing pollutants. On December 30, 2011, EPA proposed a limited disapproval of the Mississippi regional haze SIP because of deficiencies in the State's regional haze SIP submittal arising from the State's reliance on CAIR to meet certain regional haze requirements. In that action, EPA also proposed to issue a Federal Implementation Plan (FIP) to address the deficiencies in Mississippi's SIP associated with the BART requirements for NO_x for electrical generating units (EGUs) based on EPA's proposed revisions to the RHR allowing states to substitute participation in the trading programs under the Transport Rule for source-specific BART. However, EPA did not propose a plan to address the deficiencies associated with the BART requirements for SO₂ since the Transport Rule does not cover SO₂ emissions from Mississippi EGUs. Because Mississippi also relied on CAIR in assessing the need for emissions reductions for SO₂ from EGUs to satisfy BART requirements, the State will have to re-evaluate EGUs with respect to SO₂ BART requirements.

Data from the existing visibility monitoring network, the “Interagency Monitoring of Protected Visual Environments” (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national park and wilderness areas. The average visual range³ in many Class I areas⁴ (i.e., national parks and memorial parks, wilderness areas, and international parks meeting certain size criteria) in the western United States is 100-150 kilometers, or about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. In most of the eastern Class I areas of the United States, the average visual range is less than 30 kilometers, or about one-fifth of the visual range that would exist under estimated natural conditions. *See* 64 FR 35715 (July 1, 1999).

B. Requirements of the CAA and EPA’s Regional Haze Rule (RHR)

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation’s national parks and wilderness areas. This section of the CAA establishes as a national goal the “prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I areas which impairment results from manmade air pollution.” On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is “reasonably attributable” to a single source or small group of sources, i.e., “reasonably attributable visibility impairment.” *See* 45 FR 80084. These regulations represented

³Visual range is the greatest distance, in kilometers or miles, at which a dark object can be viewed against the sky.

⁴Areas designated as mandatory Class I areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. *See* 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. *See* 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. *See* 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to “mandatory Class I Federal areas.” Each mandatory Class I area is the responsibility of a “Federal Land Manager.” *See* 42 U.S.C. 7602(i). When the term “Class I area” is used in this action, it means a “mandatory Class I Federal area.”

the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling, and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues. EPA promulgated a rule to address regional haze on July 1, 1999 (64 FR 35713), the RHR. The RHR revised the existing visibility regulations to integrate into the regulation provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in EPA's visibility protection regulations at 40 CFR 51.300-309. Some of the main elements of the regional haze requirements are summarized in section III of this preamble. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia, and the Virgin Islands.⁵ 40 CFR 51.308(b) requires states to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.

C. Roles of Agencies in Addressing Regional Haze

Successful implementation of the regional haze program will require long-term regional coordination among states, tribal governments, and various Federal agencies. As noted above, pollution affecting the air quality in Class I areas can be transported over long distances, even hundreds of kilometers. Therefore, to effectively address the problem of visibility impairment in Class I areas, states need to develop strategies in coordination with one another, taking into account the effect of emissions from one jurisdiction on the air quality in another.

⁵Albuquerque/Bernalillo County in New Mexico must also submit a regional haze SIP to completely satisfy the requirements of section 110(a)(2)(D) of the CAA for the entire State of New Mexico under the New Mexico Air Quality Control Act (section 74-2-4).

Because the pollutants that lead to regional haze can originate from sources located across broad geographic areas, EPA has encouraged the states and tribes across the United States to address visibility impairment from a regional perspective. Five regional planning organizations (RPOs) were developed to address regional haze and related issues. The RPOs first evaluated technical information to better understand how their states and tribes impact Class I areas across the country, and then pursued the development of regional strategies to reduce emissions of particulate matter (PM) and other pollutants leading to regional haze.

The Visibility Improvement State and Tribal Association of the Southeast (VISTAS) RPO is a collaborative effort of state governments, tribal governments, and various federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility and other air quality issues in the southeastern United States. Member state and tribal governments include: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, and the Eastern Band of the Cherokee Indians.

III. What Are the Requirements for Regional Haze SIPs?

A. The CAA and the RHR

Regional haze SIPs must assure reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas. Section 169A of the CAA and EPA's implementing regulations require states to establish long-term strategies for making reasonable progress toward meeting this goal. Implementation plans must also give specific attention to certain stationary sources that were in existence on August 7, 1977, but were not in operation before August 7, 1962, and require these sources, where appropriate, to install BART controls

for the purpose of eliminating or reducing visibility impairment. The specific regional haze SIP requirements are discussed in further detail below.

B. Determination of Baseline, Natural, and Current Visibility Conditions

The RHR establishes the deciview as the principal metric or unit for expressing visibility. This visibility metric expresses uniform changes in haziness in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility expressed in deciviews is determined by using air quality measurements to estimate light extinction and then transforming the value of light extinction using a logarithm function. The deciview is a more useful measure for tracking progress in improving visibility than light extinction itself because each deciview change is an equal incremental change in visibility perceived by the human eye. Most people can detect a change in visibility at one deciview.⁶

The deciview is used in expressing RPGs (which are interim visibility goals towards meeting the national visibility goal), defining baseline, current, and natural conditions, and tracking changes in visibility. The regional haze SIPs must contain measures that ensure “reasonable progress” toward the national goal of preventing and remedying visibility impairment in Class I areas caused by anthropogenic air pollution by reducing anthropogenic emissions that cause regional haze. The national goal is a return to natural conditions, i.e., anthropogenic sources of air pollution would no longer impair visibility in Class I areas.

To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401-437), and as part of the process for determining reasonable progress, states must calculate the degree of existing visibility impairment at each Class I area at

⁶The preamble to the RHR provides additional details about the deciview. *See* 64 FR 35714, 35725 (July 1, 1999).

the time of each regional haze SIP submittal and periodically review progress every five years, i.e., midway through each 10-year implementation period. To do this, the RHR requires states to determine the degree of impairment (in deciviews) for the average of the 20 percent least impaired (“best”) and 20 percent most impaired (“worst”) visibility days over a specified time period at each of their Class I areas. In addition, states must also develop an estimate of natural visibility conditions for the purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. EPA has provided guidance to states regarding how to calculate baseline, natural, and current visibility conditions in documents titled, EPA’s *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule*, September 2003, (EPA-454/B-03-005 located at http://www.epa.gov/ttncaaa1/t1/memoranda/rh_envcurhr_gd.pdf), (hereinafter referred to as “EPA’s 2003 Natural Visibility Guidance”), and *Guidance for Tracking Progress Under the Regional Haze Rule*, September 2003, (EPA-454/B-03-004 located at http://www.epa.gov/ttncaaa1/t1/memoranda/rh_tpurhr_gd.pdf), (hereinafter referred to as “EPA’s 2003 Tracking Progress Guidance”).

For the first regional haze SIPs that were due by December 17, 2007, “baseline visibility conditions” were the starting points for assessing “current” visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20 percent least impaired days and 20 percent most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area, based on the average of annual values over the five-year period. The comparison of initial baseline visibility conditions to natural visibility

conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to the then current conditions will indicate the amount of progress made. In general, the 2000 - 2004 baseline period is considered the time from which improvement in visibility is measured.

C. Determination of Reasonable Progress Goals (RPGs)

The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of regional haze SIPs from the states that establish two RPGs (i.e., two distinct goals, one for the “best” and one for the “worst” days) for every Class I area for each (approximately) 10-year implementation period. The RHR does not mandate specific milestones or rates of progress, but instead calls for states to establish goals that provide for “reasonable progress” toward achieving natural (i.e., “background”) visibility conditions. In setting RPGs, states must provide for an improvement in visibility for the most impaired days over the (approximately) 10-year period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period.

States have significant discretion in establishing RPGs, but are required to consider the following factors established in section 169A of the CAA and in EPA’s RHR at 40 CFR 51.308(d)(1)(i)(A): (1) the costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. States must demonstrate in their SIPs how these factors are considered when selecting the RPGs for the best and worst days for each applicable Class I area. States have considerable flexibility in how they take these factors into consideration, as noted in EPA’s *Guidance for Setting Reasonable Progress Goals under the Regional Haze Program* (“EPA’s Reasonable Progress Guidance”), July 1, 2007, memorandum from William L.

Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1-10 (pp.4-2, 5-1). In setting the RPGs, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 (referred to as the “uniform rate of progress” or the “glidepath”) and the emissions reduction measures needed to achieve that rate of progress over the 10-year period of the SIP. Uniform progress towards achievement of natural conditions by the year 2064 represents a rate of progress which states are to use for analytical comparison to the amount of progress they expect to achieve. In setting RPGs, each state with one or more Class I areas (“Class I state”) must also consult with potentially “contributing states,” i.e., other nearby states with emissions sources that may be affecting visibility impairment at the Class I state’s areas. *See* 40 CFR 51.308(d)(1)(iv).

D. Best Available Retrofit Technology (BART)

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources⁷ built between 1962 and 1977 procure, install, and operate the “Best Available Retrofit Technology” as determined by the state. Under the RHR, states are directed to conduct BART determinations for such “BART-eligible” sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. Rather than requiring source-specific BART controls, states also have the flexibility to adopt an emissions trading program or other

⁷The set of “major stationary sources” potentially subject to BART is listed in CAA section 169A(g)(7).

alternative program as long as the alternative provides greater reasonable progress towards improving visibility than BART.

On July 6, 2005, EPA published the *Guidelines for BART Determinations Under the Regional Haze Rule* at Appendix Y to 40 CFR Part 51 (hereinafter referred to as the “BART Guidelines”) to assist states in determining which of their sources should be subject to the BART requirements and in determining appropriate emissions limits for each applicable source. In making a BART determination for a fossil fuel-fired electric generating plant with a total generating capacity in excess of 750 megawatts (MW), a state must use the approach set forth in the BART Guidelines. A state is encouraged, but not required, to follow the BART Guidelines in making BART determinations for other types of sources.

States must address all visibility-impairing pollutants emitted by a source in the BART determination process. The most significant visibility impairing pollutants are SO₂, NO_x, and PM. EPA has stated that states should use their best judgment in determining whether VOC or NH₃ compounds impair visibility in Class I areas.

Under the BART Guidelines, states may select an exemption threshold value for their BART modeling, below which a BART-eligible source would not be expected to cause or contribute to visibility impairment in any Class I area. The state must document this exemption threshold value in the SIP and must state the basis for its selection of that value. Any source with emissions that model above the threshold value would be subject to a BART determination review. The BART Guidelines acknowledge varying circumstances affecting different Class I areas. States should consider the number of emissions sources affecting the Class I areas at issue and the magnitude of the individual sources’ impacts. Any exemption threshold set by the state should not be higher than 0.5 deciview.

In their SIPs, states must identify potential BART sources, described as “BART-eligible sources” in the RHR, and document their BART control determination analyses. In making BART determinations, section 169A(g)(2) of the CAA requires that states consider the following factors: (1) the costs of compliance, (2) the energy and non-air quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) the remaining useful life of the source, and (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. States are free to determine the weight and significance to be assigned to each factor.

A regional haze SIP must include source-specific BART emissions limits and compliance schedules for each source subject to BART. Once a state has made its BART determination, the BART controls must be installed and in operation as expeditiously as practicable, but no later than five years after the date of EPA approval of the regional haze SIP. *See* CAA section 169(g)(4); *see* 40 CFR 51.308(e)(1)(iv). In addition to what is required by the RHR, general SIP requirements mandate that the SIP must also include all regulatory requirements related to monitoring, recordkeeping, and reporting for the BART controls on the source.

As noted above, the RHR allows states to implement an alternative program in lieu of BART so long as the alternative program can be demonstrated to achieve greater reasonable progress toward the national visibility goal than would BART. Under regulations issued in 2005 revising the regional haze program, EPA made just such a demonstration for CAIR. *See* 70 FR 39104 (July 6, 2005). EPA’s regulations provide that states participating in the CAIR cap-and-trade program under 40 CFR part 96 pursuant to an EPA-approved CAIR SIP or which remain subject to the CAIR FIP in 40 CFR part 97 need not require affected BART-eligible EGUs to install, operate, and maintain BART for emissions of SO₂ and NO_x. *See* 40 CFR 51.308(e)(4).

Because CAIR did not address direct emissions of PM, states were still required to conduct a BART analysis for PM emissions from EGUs subject to BART for that pollutant. Challenges to CAIR, however, resulted in the remand of the rule to EPA. *See North Carolina v. EPA*, 550 F.3d 1176 (D.C. Cir. 2008).

EPA issued a new rule in 2011 to address the interstate transport of NO_x and SO₂ in the eastern United States. *See* 76 FR 48208 (August 8, 2011) (“the Transport Rule,” also known as the Cross-State Air Pollution Rule). On December 30, 2011, EPA proposed to find that the trading programs in the Transport Rule would achieve greater reasonable progress towards the national goal than would BART in the states in which the Transport Rule applies. *See* 76 FR 82219. Based on this proposed finding, EPA also proposed to revise the RHR to allow states to substitute participation in the trading programs under the Transport Rule for source-specific BART. EPA has not yet taken final action on that rule. Also on December 30, 2011, the D.C. Circuit issued an order addressing the status of the Transport Rule and CAIR in response to motions filed by numerous parties seeking a stay of the Transport Rule pending judicial review. In that order, the D.C. Circuit stayed the Transport Rule pending the court’s resolutions of the petitions for review of that rule in *EME Homer Generation, L.P. v. EPA* (No. 11-1302 and consolidated cases). The court also indicated that EPA is expected to continue to administer CAIR in the interim until the court rules on the petitions for review of the Transport Rule.

E. Long-Term Strategy (LTS)

Consistent with the requirement in section 169A(b) of the CAA that states include in their regional haze SIP a 10 to 15 year strategy for making reasonable progress, section 51.308(d)(3) of the RHR requires that states include a LTS in their regional haze SIPs. The LTS is the

compilation of all control measures a state will use during the implementation period of the specific SIP submittal to meet applicable RPGs. The LTS must include “enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals” for all Class I areas within, or affected by emissions from, the state. *See* 40 CFR 51.308(d)(3).

When a state’s emissions are reasonably anticipated to cause or contribute to visibility impairment in a Class I area located in another state, the RHR requires the impacted state to coordinate with the contributing states in order to develop coordinated emissions management strategies. *See* 40 CFR 51.308(d)(3)(i). In such cases, the contributing state must demonstrate that it has included, in its SIP, all measures necessary to obtain its share of the emissions reductions needed to meet the RPGs for the Class I area. The RPOs have provided forums for significant interstate consultation, but additional consultations between states may be required to sufficiently address interstate visibility issues. This is especially true where two states belong to different RPOs.

States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources. At a minimum, states must describe how each of the following seven factors listed below are taken into account in developing their LTS: (1) emissions reductions due to ongoing air pollution control programs, including measures to address RAVI; (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; and (7) the

anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS. *See* 40 CFR 51.308(d)(3)(v).

F. Coordinating Regional Haze and Reasonably Attributable Visibility Impairment (RAVI) LTS

As part of the RHR, EPA revised 40 CFR 51.306(c) regarding the LTS for RAVI to require that the RAVI plan must provide for a periodic review and SIP revision not less frequently than every three years until the date of submission of the state's first plan addressing regional haze visibility impairment, which was due December 17, 2007, in accordance with 40 CFR 51.308(b) and (c). On or before this date, the state must revise its plan to provide for review and revision of a coordinated LTS for addressing RAVI and regional haze, and the state must submit the first such coordinated LTS with its first regional haze SIP. Future coordinated LTS's, and periodic progress reports evaluating progress towards RPGs, must be submitted consistent with the schedule for SIP submission and periodic progress reports set forth in 40 CFR 51.308(f) and 51.308(g), respectively. The periodic review of a state's LTS must report on both regional haze and RAVI impairment and must be submitted to EPA as a SIP revision.

G. Monitoring Strategy and Other Implementation Plan Requirements

Section 51.308(d)(4) of the RHR includes the requirement for a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I areas within the state. The strategy must be coordinated with the monitoring strategy required in section 51.305 for RAVI. Compliance with this requirement may be met through "participation" in the IMPROVE network, i.e., review and use of monitoring data from the network. The monitoring strategy is due with the first regional haze SIP, and it must be reviewed every five years. The monitoring strategy must also provide for

additional monitoring sites if the IMPROVE network is not sufficient to determine whether RPGs will be met.

The SIP must also provide for the following:

- Procedures for using monitoring data and other information in a state with mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas both within and outside the state;
- Procedures for using monitoring data and other information in a state with no mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas in other states;
- Reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state, and where possible, in electronic format;
- Developing a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. The inventory must include emissions for a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions. A state must also make a commitment to update the inventory periodically; and
- Other elements, including reporting, recordkeeping, and other measures necessary to assess and report on visibility.

The RHR requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. Periodic SIP revisions must meet the core requirements of section 51.308(d) with the exception of BART. The requirement to evaluate sources for BART applies only to the first regional haze SIP. Facilities subject to BART must continue to comply

with the BART provisions of section 51.308(e), as noted above. Periodic SIP revisions will assure that the statutory requirement of reasonable progress will continue to be met.

H. Consultation with States and Federal Land Managers (FLMs)

The RHR requires that states consult with FLMs before adopting and submitting their SIPs. *See* 40 CFR 51.308(i). States must provide FLMs an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP. This consultation must include the opportunity for the FLMs to discuss their assessment of impairment of visibility in any Class I area and to offer recommendations on the development of the RPGs and on the development and implementation of strategies to address visibility impairment. Further, a state must include in its SIP a description of how it addressed any comments provided by the FLMs. Finally, a SIP must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas.

IV. What is EPA's Analysis of Mississippi's Regional Haze Submittal?

On September 22, 2008, and May 9, 2011, MDEQ submitted revisions to the Mississippi SIP to address regional haze as required by EPA's RHR.

A. No Affected Class I Areas in Mississippi

Mississippi has no Class I area within its borders. The following Class I areas are the closest to the State's boundaries: the Breton National Wildlife Refuge (Breton) in Louisiana,

Sipsey Wilderness Area (Sipsey) in Alabama, and Caney Creek Wilderness Area (Caney Creek) in Arkansas. Mississippi is responsible for developing a regional haze SIP that addresses sources within its borders that affect Class I areas in other states and for consulting with these other states. The September 22, 2008, Mississippi regional haze SIP, as later amended on May 9, 2011, identified and considered emissions sources within Mississippi that may cause or contribute to visibility impairment in Class I areas in neighboring states as required by 40 CFR 51.308(d)(3). The VISTAS RPO worked with the State in developing the technical analyses used to make these determinations, including state-by-state contributions to visibility impairment in specific Class I areas, which included the Class I areas affected by emissions from Mississippi.

B. Long-Term Strategy/Strategies

As described in section III.E of this action, the LTS is a compilation of state-specific control measures relied on by a state for achieving RPGs in Class I areas affected by emissions sources in the state. Mississippi's LTS for the first implementation period addresses the emissions reductions from federal, state, and local controls that take effect in the State from the end of the baseline period starting in 2004 until 2018. The Mississippi LTS was developed by the State, in coordination with the VISTAS RPO, through an evaluation of the following components: (1) identification of the emissions units within Mississippi and in surrounding states that likely have the largest impacts currently on visibility at Class I areas in nearby states, and (2) estimation of emissions reductions for 2018 based on all controls required or expected under federal and state regulations for the 2004-2018 period (including BART).

In a separate action proposing limited disapproval of the regional haze SIPs of a number of states, EPA noted that these states relied on the trading programs of CAIR to satisfy the BART requirement and the requirement for a LTS sufficient to achieve the state-adopted RPGs. *See* 76 FR 82219 (December 30, 2011). In that action, EPA proposed a limited disapproval of Mississippi's regional haze SIP submittal insofar as the SIP relied on CAIR. For that reason, EPA is not taking action on that aspect of Mississippi's regional haze SIP in this action. Comments on the December 30, 2011, proposed determination are accepted at Docket ID No. EPA-HQ-OAR-2011-0729. The comment period for EPA's December 30, 2011, proposed rulemaking is scheduled to end on February 28, 2012.

1. Emissions Inventory for 2018 with Federal and State Control Requirements

The emissions inventory used in the regional haze technical analyses was developed by VISTAS with assistance from Mississippi. The 2018 emissions inventory was developed by projecting 2002 emissions and applying emissions reductions expected from federal and state regulations affecting the emissions of VOC and the visibility-impairing pollutants NO_x, PM, and SO₂. The BART Guidelines direct states to exercise judgment in deciding whether VOC and NH₃ impair visibility in their Class I area(s). As discussed further in section IV.B.3, VISTAS performed modeling sensitivity analyses, which demonstrated that anthropogenic emissions of VOC and NH₃ do not significantly impair visibility in the VISTAS region. Thus, while emissions inventories were also developed for NH₃ and VOC, and applicable Federal VOC reductions were incorporated into Mississippi's regional haze analyses, Mississippi did not further evaluate NH₃ and VOC emissions sources for potential controls under BART or reasonable progress.

VISTAS developed emissions for five inventory source classifications: stationary point and area sources, off-road and on-road mobile sources, and biogenic sources. Stationary point sources are those sources that emit greater than a specified tonnage per year, depending on the pollutant, with data provided at the facility level. Stationary area sources are those sources whose individual emissions are relatively small, but due to the large number of these sources, the collective emissions from the source category could be significant. VISTAS estimated emissions on a countywide level for the inventory categories of: a) stationary area sources; b) off-road (or non-road) mobile sources (i.e., equipment that can move but does not use the roadways); and c) biogenic sources (which are natural sources of emissions, such as trees). On-road mobile source emissions are estimated by vehicle type and road type, and are summed to the countywide level.

There are many federal and state control programs being implemented that VISTAS and Mississippi anticipate will reduce emissions between the end of the baseline period and 2018. Emissions reductions from these control programs are projected to achieve substantial visibility improvement by 2018 in the Class I areas in surrounding states. The control programs relied upon by Mississippi include CAIR; EPA's NO_x SIP Call; North Carolina's Clean Smokestacks Act; Georgia multi-pollutant rule; consent decrees for Tampa Electric, Virginia Electric and Power Company, Gulf Power-Plant Crist, East Kentucky Power Cooperative – Cooper and Spurlock stations, and American Electric Power; NO_x and/or VOC reductions from the control rules in 1-hour ozone SIPs for Atlanta, Birmingham, and Northern Kentucky; North Carolina's NO_x Reasonably Available Control Technology; state rule for Philip Morris USA and Norandal USA in the Charlotte/Gastonia/Rock Hill 1997 8-hour ozone nonattainment area; federal 2007 heavy duty diesel engine standards for on-road trucks and buses; federal Tier 2 tailpipe controls for on-road vehicles; federal large spark ignition and recreational vehicle controls; and EPA's

non-road diesel rules. Controls from various federal Maximum Achievable Control Technology (MACT) rules were also utilized in the development of the 2018 emissions inventory projections. These MACT rules include the industrial boiler/process heater MACT (referred to as “Industrial Boiler MACT”), the combustion turbine and reciprocating internal combustion engines MACTs, and the VOC 2-, 4-, 7-, and 10-year MACT standards.

Effective July 30, 2007, the D.C. Circuit mandated the vacatur and remand of the Industrial Boiler MACT Rule.⁸ This MACT was vacated since it was directly affected by the vacatur and remand of the Commercial and Industrial Solid Waste Incinerator Definition Rule. EPA proposed a new Industrial Boiler MACT rule to address the vacatur on June 4, 2010 (75 FR 32006) and issued a final rule on March 21, 2011 (76 FR 15608). The VISTAS modeling included emissions reductions from the vacated Industrial Boiler MACT rule, and Mississippi did not redo its modeling analysis when the rule was re-issued. Even though Mississippi’s modeling is based on the vacated Industrial Boiler MACT limits, the State’s modeling conclusions are unlikely to be affected because the expected reductions due to the vacated rule were relatively small compared to the State’s total SO₂, PM_{2.5}, and coarse particulate matter (PM₁₀) emissions in 2018 (i.e., 0.1 to 0.2 percent, depending on the pollutant, of the projected 2018 SO₂, PM_{2.5}, and PM₁₀ inventory). Thus, EPA does not expect that differences between the vacated and final Industrial Boiler MACT emissions limits would affect the adequacy of the existing Mississippi regional haze SIP. If there is a need to address discrepancies between projected emissions reductions from the vacated Industrial Boiler MACT and the Industrial Boiler MACT issued March 21, 2011 (76 FR 15608), EPA expects Mississippi to do so in the State’s five-year progress report.

⁸ See *NRDC v. EPA*, 489 F.3d 1250 (D.C. Cir. 2007).

Below in Tables 2 and 3 are summaries of the 2002 baseline and 2018 estimated emissions inventories for Mississippi (based on the data in the State's September 22, 2008, submittal).

Table 2: 2002 Emissions Inventory Summary for Mississippi (tons per year)

	VOC	NO_x	PM_{2.5}	PM₁₀	NH₃	SO₂
Point	43,852	104,661	11,044	21,106	1,359	103,389
Area	131,808	4,200	50,401	343,377	58,721	771
On-Road Mobile	86,811	110,672	2,089	2,828	3,549	4,566
Non-Road Mobile	41,081	88,787	4,690	5,010	23	11,315
Total	303,552	308,320	68,224	372,321	63,652	120,041

Table 3: 2018 Emissions Inventory Summary for Mississippi (tons per year)

	VOC	NO_x	PM_{2.5}	PM₁₀	NH₃	SO₂
Point	46,452	71,804	17,172	30,046	1,591	54,367
Area	140,134	4,483	53,222	375,495	69,910	746
On-Road Mobile	31,306	30,259	810	1,607	4,520	435
Non-Road Mobile	28,842	68,252	3,203	3,452	29	6,638
Total	246,734	174,798	74,407	410,600	76,050	62,186

2. Modeling to Support the LTS and Determine Visibility Improvement for Uniform Rate of Progress

VISTAS performed modeling for the regional haze LTS for the 10 southeastern states, including Mississippi. The modeling analysis is a complex technical evaluation that began with selection of the modeling system. VISTAS used the following modeling system:

- **Meteorological Model:** The Pennsylvania State University/National Center for Atmospheric Research Mesoscale Meteorological Model is a nonhydrostatic, prognostic, meteorological model routinely used for urban- and regional- scale photochemical, PM_{2.5}, and regional haze regulatory modeling studies.

- Emissions Model: The Sparse Matrix Operator Kernel Emissions modeling system is an emissions modeling system that generates hourly gridded speciated emissions inputs of mobile, non-road mobile, area, point, fire, and biogenic emissions sources for photochemical grid models.
- Air Quality Model: The EPA's Models-3/Community Multiscale Air Quality (CMAQ) modeling system is a photochemical grid model capable of addressing ozone, PM, visibility, and acid deposition at a regional scale. The photochemical model selected for this study was CMAQ version 4.5. It was modified through VISTAS with a module for Secondary Organics Aerosols in an open and transparent manner that was also subjected to outside peer review.

CMAQ modeling of regional haze in the VISTAS region for 2002 and 2018 was carried out on a grid of 12x12 kilometer cells that covers the 10 VISTAS states (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia) and states adjacent to them. This grid is nested within a larger national CMAQ modeling grid of 36x36 kilometer grid cells that covers the continental United States, portions of Canada and Mexico, and portions of the Atlantic and Pacific Oceans along the east and west coasts. Selection of a representative period of meteorology is crucial for evaluating baseline air quality conditions and projecting future changes in air quality due to changes in emissions of visibility-impairing pollutants. VISTAS conducted an in-depth analysis which resulted in the selection of the entire year of 2002 (January 1-December 31) as the best period of meteorology available for conducting the CMAQ modeling. The VISTAS states modeling was developed consistent with EPA's *Guidance on the Use of Models and Other Analyses for Demonstrating*

Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze, located at <http://www.epa.gov/scram001/guidance/guide/final-03-pm-rh-guidance.pdf>, (EPA-454/B-07-002), April 2007, and EPA document, *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations*, located at <http://www.epa.gov/ttnchie1/eidocs/eiguid/index.html>, EPA-454/R-05-001, August 2005, updated November 2005 (“EPA’s Modeling Guidance”).

VISTAS examined the model performance of the regional modeling for the areas of interest before determining whether the CMAQ model results were suitable for use in the regional haze assessment of the LTS and for use in the modeling assessment. The modeling assessment predicts future levels of emissions and visibility impairment used to support the LTS and to compare predicted, modeled visibility levels with those on the uniform rate of progress. In keeping with the objective of the CMAQ modeling platform, the air quality model performance was evaluated using graphical and statistical assessments based on measured ozone, fine particles, and acid deposition from various monitoring networks and databases for the 2002 base year. VISTAS used a diverse set of statistical parameters from EPA’s Modeling Guidance to stress and examine the model and modeling inputs. Once VISTAS determined the model performance to be acceptable, VISTAS used the model to assess the 2018 RPGs using the current and future year air quality modeling predictions, and compared the RPGs to the uniform rate of progress for Class I areas in the states neighboring Mississippi.

In accordance with 40 CFR 51.308(d)(3), the State of Mississippi provided the appropriate supporting documentation to VISTAS and coordinated with other affected states for all required analyses since there are no Class I areas in Mississippi.

3. Relative Contributions to Visibility Impairment: Pollutants, Source Categories, and Geographic Areas

An important step toward identifying reasonable progress measures is to identify the key pollutants contributing to visibility impairment at each Class I area. To understand the relative benefit of further reducing emissions from different pollutants, source sectors, and geographic areas, VISTAS developed emissions sensitivity model runs using CMAQ to evaluate visibility and air quality impacts from various groups of emissions and pollutant scenarios in the Class I areas on the 20 percent worst visibility days.

Regarding which pollutants are most significantly impacting visibility in the VISTAS region, VISTAS' contribution assessment, based on IMPROVE monitoring data, demonstrated that ammonium sulfate is the major contributor to PM_{2.5} mass and visibility impairment at Class I areas in the VISTAS and neighboring states. On the 20 percent worst visibility days in 2000-2004, ammonium sulfate accounted for 75 to 87 percent of the calculated light extinction at the inland Class I areas in VISTAS, and 69 to 74 percent of the calculated light extinction for all but one of the coastal Class I areas in the VISTAS states. In contrast, ammonium nitrate contributed less than five percent of the calculated light extinction at the VISTAS Class I areas on the 20 percent worst visibility days. Particulate organic matter (organic carbon) accounted for 20 percent or less of the light extinction on the 20 percent worst visibility days at the VISTAS Class I areas.

VISTAS grouped its 18 Class I areas into two types, either "coastal" or "inland" (sometimes referred to as "mountain") sites, based on common/similar characteristics (e.g., terrain, geography, meteorology), to better represent variations in model sensitivity and performance within the VISTAS region, and to describe the common factors influencing visibility conditions in the two types of Class I areas.

Results from VISTAS' emissions sensitivity analyses indicate that sulfate particles resulting from SO₂ emissions are the dominant contributor to visibility impairment on the 20 percent worst days at all Class I areas in VISTAS. Mississippi concluded that reducing SO₂ emissions from EGU and non-EGU point sources would have the greatest visibility benefits for the Class I areas impacted by Mississippi sources. Because ammonium nitrate is a small contributor to PM_{2.5} mass and visibility impairment on the 20 percent worst days at the inland Class I areas in VISTAS, the benefits of reducing NO_x and NH₃ emissions at these sites are small.

The VISTAS sensitivity analyses show that VOC emissions from biogenic sources such as vegetation also contribute to visibility impairment. However, control of these biogenic sources of VOC would be extremely difficult, if not impossible. The anthropogenic sources of VOC emissions are minor compared to the biogenic sources. Therefore, controlling anthropogenic sources of VOC emissions would have little if any visibility benefits at the Class I areas in and adjacent to the VISTAS region. The sensitivity analyses also show that reducing primary carbon from point sources, ground level sources, or fires is projected to have small to no visibility benefit at the VISTAS Class I areas.

Mississippi considered the factors listed in under 40 CFR 51.308(d)(3)(v) and in section III.E of this action to develop its LTS as described below. Mississippi, in conjunction with VISTAS, demonstrated in its SIP that elemental carbon (a product of highway and non-road diesel engines, agricultural burning, prescribed fires, and wildfires), fine soils (a product of construction activities and activities that generate fugitive dust), and ammonia are relatively minor contributors to visibility impairment at the Class I areas in states near to Mississippi. Mississippi considered agricultural and forestry smoke management techniques to address

visibility impacts from elemental carbon. Mississippi has drafted but not finalized a Smoke Management Plan that addresses the issues laid out in the EPA's 1998 *Interim Air Quality Policy on Wildland and Prescribed Fires* available at:

<http://www.epa.gov/ttncaaa1/t1/memoranda/firefnl.pdf>. Under current smoke management practices, the Mississippi Forestry Commission, in conjunction with MDEQ, issues burning permits based on daily weather forecasts. A permit is required for any fire set for a recognized agricultural or forestry purpose. With regard to fine soils, the State considered those activities that generate fugitive dust, including construction activities. Mississippi has no specific provisions to mitigate dust emissions from construction activities. However, there are nuisance provisions in State regulations that would apply if construction or other activities were generating significant emissions. Given the distance of the closest Class I area (Breton) to Mississippi, the nuisance provisions may provide adequate control from these activities. With regard to ammonia, the State has chosen not to develop controls for ammonia emissions from Mississippi sources in this first implementation period because of their relatively minor contribution to visibility impairment.

EPA preliminarily concurs with the State's technical demonstration showing that elemental carbon, fine soils, and ammonia are not significant contributors to visibility in any Class I area, and therefore, proposes to find that Mississippi has adequately satisfied 40 CFR 51.308(d)(3)(v).

The emissions sensitivity analyses conducted by VISTAS predict that reductions in SO₂ emissions from EGU and non-EGU industrial point sources will result in the greatest improvements in visibility in the Class I areas in the VISTAS region, more than any other visibility-impairing pollutant. Additional, smaller benefits are projected from SO₂ emissions

reductions from non-utility industrial point sources. SO₂ emissions contributions to visibility impairment from other RPO regions are comparatively small in contrast to the VISTAS states' contributions and, thus, controlling sources outside of the VISTAS region is predicted to provide less significant improvements in visibility in the Class I areas in VISTAS.

SO₂ sources for which it is demonstrated that no additional controls are reasonable in this current implementation period will not be exempted from future assessments for controls in subsequent implementation periods or, when appropriate, from the five-year periodic SIP reviews. In future implementation periods, additional controls on these SO₂ sources evaluated in the first implementation period may be determined to be reasonable, based on a reasonable progress control evaluation, for continued progress toward natural conditions for the 20 percent worst days and to avoid further degradation of the 20 percent best days. Similarly, in subsequent implementation periods, the State may use different criteria for identifying sources for evaluation and may consider other pollutants as visibility conditions change over time.

4. Procedure for Identifying Sources to Evaluate for Reasonable Progress Controls in Mississippi and Surrounding Areas

As discussed in section IV.B.3. of this action, through comprehensive evaluations by VISTAS and the Southern Appalachian Mountains Initiative (SAMI),⁹ the VISTAS states concluded that sulfate particles resulting from SO₂ emissions account for the greatest portion of the regional haze affecting the Class I areas in VISTAS region and surrounding states. Utility

⁹ Prior to VISTAS, the southern states cooperated in a voluntary regional partnership "to identify and recommend reasonable measures to remedy existing and prevent future adverse effects from human-induced air pollution on the air quality related values of the Southern Appalachian Mountains." States cooperated with FLMs, the EPA, industry, environmental organizations, and academia to complete a technical assessment of the impacts of acid deposition, ozone, and fine particles on sensitive resources in the Southern Appalachians. The SAMI Final Report was delivered in August 2002.

and non-utility boilers are the main sources of SO₂ emissions within the southeastern United States. VISTAS developed a methodology for the VISTAS states, which enables the states to focus their reasonable progress analyses on those geographic regions and source categories that impact visibility at these states' Class I areas. The state in which a Class I area is located is responsible for determining which sources, both inside and outside of that state, to evaluate for reasonable progress controls. Although Mississippi has no Class I areas, at the time VISTAS was performing this analysis, many of the surrounding states had not finalized what methodology they would use to prioritize and identify potential sources for reasonable progress evaluation. To assist the State to identify potential emissions units that might be raised during the consultation process with these other states, MDEQ applied the VISTAS methodology to identify emissions units that could potentially warrant further analysis based on their impacts on nearby Class I areas in neighboring states.

The State established a threshold to determine which emissions units may be identified by neighboring states with Class I areas to be evaluated for potential reasonable progress control depending on those states' criteria for evaluation. In applying this methodology, MDEQ first calculated the fractional contribution to visibility impairment from all emissions units within the SO₂ AOI for those surrounding Class I areas in other states potentially impacted by emissions from emissions units in Mississippi. The State then identified those emissions units with a contribution of one percent or more to the visibility impairment at that particular Class I area, and evaluated each of these units for control measures for reasonable progress, using the following four "reasonable progress factors" as required under 40 CFR 51.308(d)(1)(i)(A): (1) cost of compliance; (2) time necessary for compliance; (3) energy and non-air quality environmental impacts of compliance; and (4) remaining useful life of the emissions unit.

Mississippi's SO₂ AOI methodology identified two sources that might potentially impact the Breton Class I area: Mississippi Power Company - Plant Watson and the DuPont DeLisle facility, both in Harrison County. Since the time of Mississippi's original 2008 SIP submittal, Louisiana completed and submitted a regional haze SIP to address visibility at Breton. Neither Plant Watson nor the DuPont DeLisle facility were identified by Louisiana in consultations with Mississippi or in the Louisiana regional haze SIP as sources identified for reasonable progress control evaluation as sources potentially impacting Breton. Consequently, Mississippi determined that no further control analysis was necessary at these facilities at this time and no controls were adopted for reasonable progress for Mississippi Power Company - Plant Watson or the DuPont DeLisle facility during this implementation period. Mississippi will continue to consult with Louisiana to assess the potential impact of facilities in Mississippi to help meet the visibility goals for Breton for future implementation periods.

Consistent with EPA's Reasonable Progress Guidance, since the Breton Class I area is in Louisiana, EPA is proposing to find that Mississippi appropriately relied on Louisiana's determination of which sources to prioritize for reasonable progress control evaluation during this implementation period.

5. BART

BART is an element of Mississippi's LTS for the first implementation period. The BART evaluation process consists of three components: (a) an identification of all the BART-eligible sources, (b) an assessment of whether the BART-eligible sources are subject to BART and (c) a determination of the BART controls. These components, as addressed by MDEQ and MDEQ's findings, are discussed as follows.

A. BART-Eligible Sources

The first phase of a BART evaluation is to identify all the BART-eligible sources within the State's boundaries. MDEQ identified the BART-eligible sources in Mississippi by utilizing the three eligibility criteria in the BART Guidelines (70 FR 39158) and EPA's regulations (40 CFR 51.301): (1) one or more emissions units at the facility fit within one of the 26 categories listed in the BART Guidelines; (2) the emissions units were not in operation prior to August 7, 1962, and were in existence on August 7, 1977; and (3) these units have the potential to emit 250 tons or more per year of any visibility-impairing pollutant.

The BART Guidelines also direct states to address SO₂, NO_x, and direct PM (including both PM₁₀ and PM_{2.5}) emissions as visibility-impairment pollutants, and to exercise judgment in determining whether VOC or ammonia emissions from a source impair visibility in an area. *See* 70 FR 39160. VISTAS modeling demonstrated that VOC from anthropogenic sources and ammonia from point sources are not significant visibility-impairing pollutants in Mississippi, as discussed in section IV.B.3. of this action. MDEQ has determined, based on the VISTAS modeling, that ammonia emissions from the State's point sources are not anticipated to cause or contribute significantly to any impairment of visibility in Class I areas and should be exempt for BART purposes.

B. BART-Subject Sources

The second phase of the BART evaluation is to identify those BART-eligible sources that may reasonably be anticipated to cause or contribute to visibility impairment at any Class I area, i.e., those sources that are subject to BART. The BART Guidelines allow states to consider

exempting some BART-eligible sources from further BART review because they may not reasonably be anticipated to cause or contribute to any visibility impairment in a Class I area. Consistent with the BART Guidelines, Mississippi required each of its BART-eligible sources to develop and submit dispersion modeling to assess the extent of their contribution to visibility impairment at surrounding Class I areas.

1. Modeling Methodology

The BART Guidelines allow states to use the CALPUFF¹⁰ modeling system (CALPUFF) or another appropriate model to predict the visibility impacts from a single source on a Class I area, and therefore, to determine whether an individual source is anticipated to cause or contribute to impairment of visibility in Class I areas, i.e., “is subject to BART.” The Guidelines state that EPA believes that CALPUFF is the best regulatory modeling application currently available for predicting a single source’s contribution to visibility impairment (70 FR 39162). Mississippi, in coordination with VISTAS, used the CALPUFF modeling system to determine whether individual sources in Mississippi were subject to or exempt from BART.

The BART Guidelines also recommend that states develop a modeling protocol for making individual source attributions and suggest that states may want to consult with EPA and their RPO to address any issues prior to modeling. The VISTAS states, including Mississippi, developed a “Protocol for the Application of CALPUFF for BART Analyses.” Stakeholders,

¹⁰Note that EPA’s reference to CALPUFF encompasses the entire CALPUFF modeling system, which includes the CALMET, CALPUFF, and CALPOST models and other pre and post processors. The different versions of CALPUFF have corresponding versions of CALMET, CALPOST, etc. which may not be compatible with previous versions (e.g., the output from a newer version of CALMET may not be compatible with an older version of CALPUFF). The different versions of the CALPUFF modeling system are available from the model developer on the following website: <http://www.src.com/verio/download/download.htm>.

including EPA, FLMS, industrial sources, trade groups, and other interested parties, actively participated in the development and review of the VISTAS protocol.

VISTAS developed a post-processing approach to use the new IMPROVE equation with the CALPUFF model results so that the BART analyses could consider both the old and new IMPROVE equations. The choice between use of the old or the new equation for calculating the visibility metrics for each Class I area is made by the state in which the Class I area is located. Mississippi allowed the use of the new IMPROVE equation in performing the screening analysis. The States of Alabama, Arkansas, and Louisiana, whose Class I areas were potentially impacted by Mississippi's BART sources, also allowed the use of the new IMPROVE equation for BART analyses.

2. Contribution Threshold

For states using modeling to determine the applicability of BART to single sources, the BART Guidelines note that the first step is to set a contribution threshold to assess whether the impact of a single source is sufficient to cause or contribute to visibility impairment at a Class I area. The BART Guidelines state that “[a] single source that is responsible for a 1.0 deciview change or more should be considered to ‘cause’ visibility impairment.” The BART Guidelines also state that “the appropriate threshold for determining whether a source ‘contributes to visibility impairment’ may reasonably differ across states,” but, “[a]s a general matter, any threshold that you use for determining whether a source ‘contributes’ to visibility impairment should not be higher than 0.5 deciviews.” The Guidelines affirm that states are free to use a lower threshold if they conclude that the location of a large number of BART-eligible sources in proximity of a Class I area justifies this approach.

Mississippi used a contribution threshold of 0.5 deciview for determining which sources are subject to BART. The State concluded that the threshold of 0.5 deciview, which is the highest level allowed by the BART Guidelines, was appropriate in this situation. This threshold of 0.5 deciview was also used by the surrounding states with Class I areas that sources in Mississippi could impact. MDEQ concluded that a 0.5 deciview threshold was appropriate in this instance. EPA is proposing to agree with Mississippi that the overall impacts of its BART-eligible sources are not sufficient to warrant a lower contribution threshold and that a 0.5 deciview threshold was appropriate in this instance.

3. Identification of Sources Subject to BART

Mississippi initially identified 15 facilities with BART-eligible sources. The State subsequently determined that 13 of these sources are exempt from being considered subject to BART. Table 5 identifies the 15 BART-eligible sources located in Mississippi and, of these, lists the two sources subject to BART.

Table 5: Mississippi BART-Eligible and Subject-to-BART Sources

Facilities With Unit(s) Subject to BART
Chevron Products Company, Pascagoula Refinery Mississippi Phosphates Corporation (MPC)

Facilities With Unit(s) Found Not Subject to BART
<p><i>EGU CAIR and BART Modeling (PM only) Exempt Sources</i>¹¹</p> <p>Entergy Mississippi Inc, Baxter Wilson Plant Entergy Mississippi Inc, Gerald Andrus Plant Mississippi Power Company, Chevron Cogenerating Plant Mississippi Power Company, Plant Jack Watson Mississippi Power Company, Plant Victor J Daniel South Mississippi Electric Power Association, Moselle Plant¹² South Mississippi Electric Power Association, R D Morrow Plant¹³</p> <p><i>Non-EGU BART Modeling Exempt Sources</i></p> <p>Georgia Pacific Corp, Monticello Mill Greenwood Utilities, Henderson Station Holcim US Inc. International Paper Company, Vicksburg Mill Pursue Energy Corp, Thomasville Gas Plant Terra Mississippi Nitrogen Inc, Yazoo City¹⁴</p>

Two of the eight non-EGU facilities, Chevron Products Company - Pascagoula Refinery and MPC, were determined to be “subject to BART” and were required to perform an engineering analysis, which included an analysis of the five CAA BART factors, their evaluation of potential BART options, and proposed BART determinations. Six of the non-EGU sources demonstrated that they are exempt from being subject to BART. Three of these facilities, Georgia Pacific Corp - Monticello Mill, Holcim US Inc., and International Paper Company - Vicksburg Mill, modeled visibility impacts of less than 0.5 deciview at the affected Class I areas. This modeling involved assessing the visibility impact of emissions of NO_x, SO₂, and PM₁₀ as applicable to individual facilities. The remaining facility, Terra Mississippi Nitrogen Inc. in

¹¹EGUs were only evaluated for PM emissions. The State relied on CAIR to satisfy BART for SO₂ and NO_x for its EGUs subject to CAIR, in accordance with 40 CFR 51.308(e)(4). Thus, SO₂ and NO_x were not analyzed.

¹² The facility met model plant criteria as provided for in the BART Guidelines for PM emissions only. No further modeling was performed.

¹³ Ibid.

¹⁴ The facility met the model plant criteria as provided for in the BART Guidelines for PM emissions only. No further modeling was performed.

Yazoo City, met the model plant criteria for exempting out of BART certain BART-eligible sources that share specific characteristics as allowed by EPA's BART Guidelines (70 FR 39163) and no further modeling was required.

All seven BART-eligible EGUs relied on Mississippi's decision to rely upon CAIR emissions limits for SO₂ and NO_x to satisfy their obligation to comply with BART requirements in accordance with 40 CFR 51.308(e)(4). Therefore, these EGU sources only modeled PM₁₀ emissions. Five of the seven EGUs provided modeling demonstrating that their PM₁₀ emissions do not contribute to visibility impairment in any Class I area. Two of the facilities, South Mississippi Electric Power Association - Moselle Plant and South Mississippi Electric Power Association - R D Morrow Plant, met the model plant criteria in EPA's BART Guidelines (70 FR 39163) based on PM emissions only and no further modeling was required.

Prior to the CAIR remand, the State's reliance on CAIR to satisfy BART for NO_x and SO₂ for affected CAIR EGUs was fully approvable and in accordance with 40 CFR 51.308(e)(4). However, the BART assessments for CAIR EGUs for NO_x and SO₂ and other provisions in this SIP revision are based on CAIR. In a separate action, EPA has proposed a limited disapproval of the Mississippi regional haze SIP because of deficiencies in the State's regional haze SIP submittal arising from the remand by the D.C. Circuit to EPA of CAIR. *See* 76 FR 82219. Consequently, EPA is not taking action in this notice to address the state's reliance on CAIR to meet certain regional haze requirements, including BART for SO₂ and NO_x emissions from EGUs.

States such as Mississippi that are subject to the requirements of the Transport Rule trading program only for NO_x must still address BART for SO₂ and other visibility impairing pollutants. *See* 76 FR at 82224. While EPA proposed on December 30, 2011, to issue a FIP to

address the deficiencies in Mississippi's SIP associated with the BART requirements for NO_x for EGUs based on EPA's proposed revisions to the RHR allowing states to substitute participation in the trading programs under the Transport Rule for source-specific BART, EPA did not propose a plan to address the deficiencies associated with the BART requirements for SO₂ since the Transport Rule does not cover SO₂ emissions from Mississippi EGUs. Because Mississippi also relied on CAIR in assessing the need for emissions reductions for SO₂ from EGUs to satisfy BART, the State will have to re-evaluate EGUs with respect to SO₂ BART requirements. If EPA finalizes the limited disapproval for Mississippi's reliance on CAIR to satisfy the regional haze SIP requirements for SO₂, that action will trigger a 24-month clock for EPA to either implement a FIP to address those requirements or approve a revised SIP from the State that addresses SO₂ BART for its EGUs.

C. BART Determinations

Two BART-eligible non-EGU sources (i.e., Chevron Products Company - Pascagoula Refinery and MPC) had modeled visibility impacts of more than the 0.5 deciview threshold for BART exemption. These two facilities are therefore considered to be subject to BART and, consequently, were required to perform an engineering analysis, which included an analysis of the five CAA BART factors, their evaluation of potential BART options, and proposed BART determinations.

In accordance with the BART Guidelines, to determine the level of control that represents BART for each source, the State first reviewed existing controls on these units to assess whether these constituted the best controls currently available, then identified what other technically feasible controls are available, and finally, evaluated the technically feasible controls using the

five BART statutory factors. The State's evaluations and conclusions, and EPA's assessment, are summarized below.

1. Chevron Products Company - Pascagoula Refinery

The modeled visibility impact resulting from Chevron Refinery's emissions was 3.89 deciview at Breton. As stated in the State's submittal, Chevron has significant emissions reductions planned due to permitted projects that are currently or will soon be underway and to an enforcement consent decree issued June 7, 2005. As a result of ongoing and planned projects, emissions of NO_x from BART eligible sources will be reduced from 1,480 pounds per hour (lb/hr) to 521 lb/hr, SO₂ emissions will be reduced from 3,154 lb/hr to 248 lb/hr, and PM₁₀ emissions will be reduced from 187 lb/hr to 146 lb/hr.

For SO₂, the units affected by the 2005 consent decree emitted 3,032.7 lb/hr daily maximum average from 2001-2003, which will be reduced by 2,884.3 lb/hr of SO₂. The units involved in Chevron's consent decree contribute 96 percent of the SO₂ emissions for the refinery's BART-eligible sources. The consent decree will reduce NO_x by 960 lb/hr and PM₁₀ by 41 lb/hr with a modeled visibility improvement of 2.99 deciview at Breton.

Mississippi evaluated three additional control options, two affecting specific NO_x generating units and one for additional SO₂ control. The first option (Option 1) was to install ultra-low NO_x burners (ULNB) on three of the largest emissions units. These units are the Crude Unit 1 Vacuum Furnace (F-1102), the Crude Unit 1 Atmospheric Furnace (F-1101), and the Rheniformer I Reactor Furnaces (F-1501/2/3). This option could reduce NO_x emissions from these sources from 139 lb/hr to 38 lb/hr, a reduction of 101 lb/hr, and total refinery BART-

eligible source NO_x emissions would be reduced by 17 percent from the currently planned future emissions.

The second option (Option 2) was to also install ULNB in the Hydrogen Plant No. 2 (F-6410) process heater. This source has a relatively high NO_x emissions rate before control on a lb/hr basis. However, the combustion air for this process heater is the flue gas from the associated gas turbine. The ULNBs would only control NO_x formed in the furnace. Therefore, the estimated NO_x emissions reduction is 50 percent. This option would reduce NO_x emissions from this source from 148 lb/hr to 74 lb/hr, a reduction of 74 lb/hr. By installing ULNB in the two crude units, Rhenformer I and the hydrogen plant, total refinery BART-eligible source NO_x emissions could be reduced by 31 percent from the currently planned future emissions. All the other NO_x sources have relatively small emissions.

A third option (Option 3) considered to reduce SO₂ emissions is to decrease the sulfur content of the refinery fuel gas. Currently, the hydrogen sulfide (H₂S) content of the refinery fuel gas is controlled to approximately 50 part per million by volume (ppmv), which is well below the New Source Performance Standard emissions limit of 162 ppmv of H₂S. However, the refinery fuel gas also contains approximately 100 ppmv of non-H₂S sulfur compounds such as various mercaptans. The Merox process could be used to reduce the mercaptan content of the refinery fuel gas. In this process, the mercaptans are removed with caustic-containing Merox catalyst. Mercaptans in the rich caustic are oxidized with air to disulfides that are decanted. The regenerated caustic is recycled. For this analysis, 90 percent control of mercaptans was assumed. This option would reduce SO₂ emissions from 248 lb/hr to 189 lb/hr.

For PM₁₀, MDEQ determined that there are no available additional controls for refinery fuel gas combustion. Most of the other remaining BART PM₁₀ emissions are refinery fuel gas

combustion emissions, which comprise a small fraction of the facility's total BART PM₁₀ emissions.

Capital costs range from \$8.6 million for Option 1 to \$40.6 million for Option 3. Annual operating costs range from \$1.3 million per year (yr) to \$5.9 million/yr. Future emissions controls already planned will reduce the number of days greater than 1.0 deciview at Breton from 58 days to 71 days to only one to five days, depending upon the year modeled. Similar results for the eighth highest delta deciview show a reduction from a range of 2.9 deciviews to 3.9 deciviews for the baseline case to only 0.7 deciview to 0.9 deciview for the future planned case. The additional emissions reductions from the three control options beyond the already planned emissions reductions will provide only very small additional visibility improvements, ranging from 0.043 deciview for Option 1 to 0.16 deciview for Option 3. For each option, the total cost effectiveness and incremental cost effectiveness exceed \$29 million/deciview. Mississippi determined that these further reductions would be very costly without significant visibility improvement. Therefore, MDEQ determined that these options are not BART due to the high cost for small visibility gains. Mississippi has determined that the emissions controls and resulting reductions from the consent decree constitute BART.

2. MPC

On November 9, 2010, MPC was issued a Permit to Construct Air Emissions Equipment that included Best Available Control Technology (BACT) emissions limits for SO₂ and sulfuric acid mist (H₂SO₄). With this project, MPC is making many upgrades, including replacing the absorption towers, installing new economizers and new superheaters, replacing duct work and piping, relocating new or refurbished acid coolers (i.e., heat exchangers), repairing the cooling

tower, and replacing the vanadium catalyst with cesium catalyst in the third and fourth converter passes. These upgrades will not result in increased sulfuric acid production capacity, which is currently permitted at 1,800 tons per day per sulfuric acid plant, but should allow for significant decreases in down-time due to more reliable operation of the plants. This will result in an actual-to-potential increase in tons per year (tpy) of SO₂; however, the project will result in greater emissions controls and lower permitted short-term and annual emissions for both pollutants.

BACT for SO₂ was determined to be the replacement of vanadium catalyst with cesium catalyst in the third and fourth converter passes. The permitted SO₂ limit is 3.0 pounds (lb) of SO₂ per ton of sulfuric acid produced, not to exceed 225 lb/hr SO₂ and 1,700 tpy SO₂. MDEQ considers this emissions limit appropriate as meeting BART for this source.

BACT for H₂SO₄ was determined to be the installation of vertical tube mist eliminators in the interpass absorption tower. The final absorption tower already has these mist eliminators installed. MPC is also replacing the economizer prior to the final absorption tower with a larger one which will have the effect of lowering the exhaust gas temperature and thus, reducing H₂SO₄ emissions. The permitted H₂SO₄ limit is 0.10 lb H₂SO₄ per ton of sulfuric acid produced, not to exceed 7.5 lb/hr H₂SO₄ and 32.85 tpy H₂SO₄. MDEQ considers this emissions limit appropriate as meeting BART for this source.

3. EPA Assessment

EPA proposes to agree with Mississippi's analyses and conclusions for the two BART-subject EGU sources described above. EPA has reviewed the State's analyses and proposes to conclude that they were conducted in a manner that is consistent with EPA's BART Guidelines and EPA's *Air Pollution Control Cost Manual*

(<http://www.epa.gov/ttnca1/products.html#cccinfo>). While lower emissions limits have been determined to be BACT for sulfuric acid plants at other facilities, both BACT and BART are case-by-case determinations. The BACT analysis appropriately documented that the limited additional capacities and configuration of catalyst beds for MPC's facility limited its ability to achieve reductions similar to those achieved at other facilities.

4. Enforceability of Emissions Limits

The BART determinations for each of the facilities discussed above and the resulting emissions limits are adopted by Mississippi into the State's regional haze SIP submittal. The limits are also in consent decrees and will be included in the facilities' title V permits. A copy of the consent decree for Chevron Products Company - Pascagoula Refinery was included in Appendix L of the Mississippi regional haze submittal for informational purposes. A copy of the construction permit issued for MPC on November 9, 2010, was included in Mississippi's supplemental submittal of May 9, 2011, for informational purposes.

C. Coordination of RAVI and Regional Haze Requirements

EPA's visibility regulations direct states to coordinate their RAVI LTS and monitoring provisions with those for regional haze, as explained in sections III.F and III.G of this action. Under EPA's RAVI regulations, the RAVI portion of a state SIP must address any integral vistas identified by the FLMs pursuant to 40 CFR 51.304. An *integral vista* is defined in 40 CFR 51.301 as a "view perceived from within the mandatory Class I Federal area of a specific

landmark or panorama located outside the boundary of the mandatory Class I Federal area.”

Visibility in any mandatory Class I area includes any integral vista associated with that area.

Since there are no Class I areas in Mississippi, no integral vistas in Mississippi have been identified. In addition, none of its sources are affected by the RAVI provisions. Thus, the Mississippi regional haze SIP submittal does not explicitly address the two requirements regarding coordination of the regional haze with the RAVI LTS and monitoring provisions.

In the State’s submittal, MDEQ updated its visibility monitoring program and developed a LTS to address regional haze. Also in this submittal, MDEQ affirmed its commitment to complete items required in the future under EPA’s RHR. Specifically, MDEQ made a commitment to review and revise its regional haze implementation plan and submit a plan revision to EPA by July 31, 2018, and every 10 years thereafter. *See* 40 CFR 51.308(f). In accordance with the requirements listed in 40 CFR 51.308(g) of EPA’s regional haze regulations and 40 CFR 51.306(c) of the RAVI LTS regulations, MDEQ made a commitment to submit a report to EPA on progress towards the RPGs for each mandatory Class I area located outside Mississippi which may be affected by emissions from within Mississippi. The progress report is required to be in the form of a SIP revision and is due every five years following the initial submittal of the regional haze SIP. Consistent with EPA’s monitoring regulations for RAVI and regional haze, Mississippi will rely on the IMPROVE network for compliance purposes, in addition to any RAVI monitoring that may be needed in the future. *See* 40 CFR 51.305, 40 CFR 51.308(d)(4). Since there are no Class I areas in Mississippi, the State also commits to ongoing consultation with the FLMs throughout the implementation process, including annual discussion of the implementation process and the most recent IMPROVE monitoring data and VIEWS data.

D. Monitoring Strategy and Other Implementation Plan Requirements

The primary monitoring network for regional haze in Mississippi is the IMPROVE network. There are currently no IMPROVE sites in Mississippi, since it has no Class I areas. In the submittal, Mississippi states its intention to continue to consult with the FLM annually on monitoring data from the IMPROVE network for Class I areas in adjacent states that might be affected by Mississippi sources.

Data produced by the IMPROVE monitoring network will be used nearly continuously for preparing the five-year progress reports and the 10-year SIP revisions, each of which relies on analysis of the preceding five years of data. The Visibility Information Exchange Web System (VIEWS) web site has been maintained by VISTAS and the other RPOs to provide ready access to the IMPROVE data and data analysis tools. Mississippi is encouraging VISTAS and the other RPOs to maintain the VIEWS or a similar data management system to facilitate analysis of the IMPROVE data.

E. Consultation with States and FLMs

1. Consultation with Other States

In December 2006 and in May 2007, the State Air Directors from the VISTAS states held formal interstate consultation meetings. The purpose of the meetings was to discuss the methodology proposed by VISTAS for identifying sources to evaluate for reasonable progress. The states invited FLM and EPA representatives to participate and to provide additional feedback. The Directors discussed the results of analyses showing contributions to visibility impairment from states to each of the Class I areas in the VISTAS region.

Mississippi received letters from Louisiana and Alabama transmitting prehearing drafts of their regional haze SIPs. MDEQ concurred on the RPGs for the Breton and Sipseys Class I areas, and committed to continue collaboration with these states in the preparation of future VISTAS studies and analyses and in addressing regional haze issues in future implementation periods. EPA proposes to find that Mississippi has adequately addressed the consultation requirements in the RHR and appropriately documented its consultation with other states in its SIP submittal.

2. Consultation with the FLMs

Through the VISTAS RPO, Mississippi and the nine other member states worked extensively with the FLMs from the U.S. Departments of the Interior and Agriculture to develop technical analyses that support the regional haze SIPs for the VISTAS states.

MDEQ received comments from the U.S. Forestry Service (USFS) and the U.S. Fish and Wildlife Service (USFWS) on the State's draft regional haze SIP dated January 10, 2008. Appendix O of the September 22, 2008, Mississippi regional haze SIP submittal includes a summary of the comments from the FLMs. Most of the comments were requesting additional information or discussion on various topics which were taken into consideration and, for the most part, included in the final September 2008 SIP submittal. The FLMs provided comments about including in the SIP submittal discussions on natural background, uniform rate of progress, and RPGs for nearby Class I areas in other states. This information was not included because Mississippi believes that is not necessary or appropriate to present this information as part of the Mississippi regional haze SIP.

On March 3, 2011, the USFWS also provided comments on the draft supplemental SIP submittal, including USFWS' views on BART for MPC and its concerns that Louisiana's methodology for prioritizing sources for potential reasonable progress control evaluation did not include Mississippi's DuPont DeLisle facility. MDEQ considered these comments in making its final determinations.

F. Periodic SIP revisions and Five-year Progress Reports

As also summarized in section IV.C of this action, consistent with 40 CFR 51.308(g), MDEQ affirmed its commitment to submitting a progress report in the form of a SIP revision to EPA every five years following this initial submittal of the Mississippi regional haze SIP. The report will evaluate the progress made towards the RPGs for the mandatory Class I areas located outside Mississippi which may be affected by emissions from within Mississippi. Mississippi also offered recommendations for several technical improvements that, as funding allows, can support the State's next LTS.

If another state's regional haze SIP identifies that Mississippi's SIP needs to be supplemented or modified, and if, after appropriate consultation Mississippi agrees, today's action may be revisited, or additional information and/or changes will be addressed in the five-year progress report SIP revision.

V. What Action is EPA Taking?

EPA is proposing a limited approval of revisions to the Mississippi SIP submitted by the State of Mississippi on September 22, 2008, and May 9, 2011, as meeting some of the applicable

regional haze requirements as set forth in sections 169A and 169B of the CAA and in 40 CFR 51.300-308, as described previously in this action.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled “Regulatory Planning and Review.”

B. Paperwork Reduction Act

Under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., OMB must approve all “collections of information” by EPA. The Act defines “collection of information” as a requirement for answers to * * * identical reporting or recordkeeping requirements imposed on ten or more persons * * *. 44 U.S.C. 3502(3)(A). The Paperwork Reduction Act does not apply to this action.

C. Regulatory Flexibility Act (RFA)

The RFA generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the CAA do not create any new requirements but simply approve requirements that the State is already imposing.

Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-state relationship under the CAA, preparation of a flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The CAA forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 (“Unfunded Mandates Act”), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that today’s proposal does not include a federal mandate that may result in estimated costs of \$100 million or more to either state, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no

additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications.” “Policies that have Federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.” Under Executive Order 13132, EPA may not issue a regulation that has Federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by state and local governments, or EPA consults with state and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has Federalism implications and that preempts state law unless the Agency consults with state and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves a state rule implementing a Federal standard, and does not alter the relationship

or the distribution of power and responsibilities established in the CAA. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination with Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This proposed rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

Section 12 of the NTTAA of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use “voluntary consensus standards” (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

EPA believes that VCS are inapplicable to this action. Today’s action does not require the public to perform activities conducive to the use of VCS.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxide, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Dated: 2/15/2012

Signed: A. Stanley Meiburg

Acting Regional Administrator,

Region 4

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